

Introduction

Nutritional modulation of aging

The majority of past meetings of the American Aging Association, and many of the issues of the “old” *AGE* journal have focused primarily on the cellular, genetic, and molecular aspects of aging. Thus, we have heard for years about worm, yeast, cell, and fly senescence, along with associated studies on telomeres, mitochondrial DNA and, of course, the gold standard, caloric restriction. However, the hope of “engineered negligible senescence” notwithstanding, the problem is that, thus far, this plethora of research, while providing great science and a wealth of information that may be useful for future generations, has told us little about what we as individuals can do NOW to alter the physiological declines with aging. Meanwhile, the proportion of aged individuals in industrialized countries continues to increase. As examples: (a) the people who are 65 and over in the world today represent more than 50% of all those who have attained this age throughout all human history; (b) by the year 2050, 30% of the total population of the US will be over 65 years of age, and there is a high probability that they will be exhibiting the most common correlative motor and cognitive behavioral changes that occur in aging. Additionally, many of these changes will be occurring against a background of increased obesity and related health care costs. Therefore, the immediate necessity of beginning to address this crisis cannot be overstated.

Recent research from many laboratories suggests that forestalling or reversing some of the major deleterious effects of aging might be accomplished through nutritional means. In this regard it may be that caloric selection will become just as important as caloric restriction in accomplishing the goal of “calorically mediated successful aging.” Therefore, as pointed out in Dr. Ingram’s editorial in this issue, “this first entry under the journal’s new look and mission is the current special issue focused on the ‘Nutritional Modulation of Aging’.” In organizing this issue, we have tried to select articles on nutrition covering several topics that include caloric restriction, vitamin E supplementation, and dietary supplementation of fruits and/or vegetables. We have done this not only to introduce the “new *Age*” of the journal, but also to try to demonstrate that the keys to successful aging may not lie entirely in the distant land of the geneticists and cell biologists, but may instead be as close as the colorful display in the produce section of your supermarket or the backyard garden.

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